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| Review Unit 4-Chapter 11.3, 15.1,15.2, Ch 7, 16.1 and 16.2 Chem 11- Mrs. Sanford Name: |
| Spectator ion- |
| Net ionic equation- |
| Using a solubility table salt of alkali metals are\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, ammonia is also soluble. Nitrates, \_\_\_\_\_\_\_\_\_\_, sulphates and chlorides(except for those attached to Pb2+, Ag +, Ba2+ ,Sr2+, Ca2+. Insoluble compounds usually contain \_\_\_\_\_, \_\_\_\_, \_\_\_\_\_, \_\_\_\_\_and hydroxides. (table 11.3) |
| Water is polar because of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |
| There are\_\_\_\_\_\_\_\_valence orbitals in the valence level of representative elements. |
| Surface tension- |
| Vapor pressure- |
| Solute- |
| Solvent- |
| Solvation- |
| Electrolyte- Non-electrolyte- |
| Hydrate- |
| #valence electrons=\_\_\_\_\_\_\_\_\_\_\_ |
| A maximum of \_\_\_\_\_\_\_electrons can occupy each individual orbital in the valence orbitals. |
| Cation- Anion- |
| Octet rule: |
| Lone pair: Bonding pair:  (or non-bonding pair) |
| Draw Lewis electron dot diagrams below for the following elements: H, Mg, I, S, P, C, B |
| |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | H● |  |  |  |  |  |  | |
| Ionic bond- |
| Chemical formula- |
| Formula Unit- |
| Three properties of ionic compounds are-   1. 2- 3- |
| Metallic bonds- An alloy is- |
| What 3 factors involve the contact of a solute and its solvent-   1. 2- 3- |
| Saturated means- Unsaturated- |
| Units for solubility- Solubility is affected by\_\_\_\_\_\_\_\_\_\_\_and pressure |
| The element with the highest electronegativity is\_\_\_\_\_\_\_\_\_\_. |
| Molarity- give the units and a formula🡪 |
| Give a formula for working with dilution of a solution: V1C1= |
| %by volume= |
| %by mass- |
| Calculate the volume of concentrated phosphoric acid(14.6 mol/L) that must be diluted to prepare 500 mL of a 1.25 mol/L solution. |
| Calculate the mass of KHC4H4O6 that is measured to prepare 100 mL of a 0.150mol/L standard solution. |
| Calculate the concentration of a solution containing 16.0 g of sodium hydroxide in 2.0 L of water. |

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| --- | --- | --- | --- | --- |
| Formula | Lewis electron dot diagram | Structural diagram |  | Polarity |
| Ammonia |  |  |  |  |
| Fluorine |  |  |  |  |
| Acetic acid |  |  |  |  |
| water |  |  |  |  |
| Ethnol |  |  |  |  |
| propane |  |  |  |  |
| Boron trichloride |  |  |  |  |
|  |  |  |  |  |

Give 2 examples of elements that have the following number of bonds:

|  |  |  |  |
| --- | --- | --- | --- |
| Single: | Double: | Triple: | All 3 types: |
| ex. | ex. | ex. | ex. -N= , -N-,  N   |

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| Do p 343 #29, p 344 #, 32a,33a,34all,35a,c, p 193 7a,c,9all,p 481 #9, p 482#11,  p 484 #12p 485 14,15 |